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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/719,901 | 11/21/2003 | Steven R. Sedlmayr | AUO1022 | 4026 |

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| EXAMINER | |
|---|---|
| FINEMAN, LEE A | |
| **ART UNIT** | **PAPER NUMBER** |
| 2872 | |

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/719,901 | SEDLMAYR, STEVEN R. | |
| | Examiner | Art Unit | |
| | Lee Fineman | 2872 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *347-370* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *347-370* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/14/004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 347-370 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atarashi et al., U.S. Patent No. 5,172,254 in view of Konno et al., U.S. Patent No 4,497,015.

Regarding claims 347-349, 353-355, 359-361 and 365-367, Atarashi et al. disclose in fig. 5 a system and method of producing one or more collinear beams of electromagnetic energy/light, comprising:

[a] means (11, 12, 13, 21BP, 21GP1, 16, 21BS, 21GS1) for producing four or more separate beams of electromagnetic energy/light (fig. 5), each of the separate beams of electromagnetic energy/light having the same selected predetermined orientation of a chosen component of electromagnetic wave field vectors substantially across each beam (in so far as each beam has only an S or only a P polarization) and having a predetermined range of wavelengths;

[b] means (15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of a plurality of portions of each of the separate beams of electromagnetic energy/light by passing the plurality of portions of each of the separate beams of electromagnetic energy/light through a respective one of a plurality of altering means whereby the selected predetermined orientation of

the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the separate beams of electromagnetic energy/light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the separate beams of electromagnetic energy/light passes through the respective one of the plurality of means for altering the selected predetermined orientation of the chosen component of the electromagnetic wave field vectors (column 7, line 56-column 8, line 12);

[c][i] means (21GP2, 21RP) for combining at least one of the altered separate beams of electromagnetic energy/light with at least one of the other altered separate beams of electromagnetic energy/light into a first single collinear beam of electromagnetic energy/light without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the combined separate beams of electromagnetic energy/light, and [ii] means (21GS2, 21RS) for combining at least one of the altered separate beams of electromagnetic energy/light with at least one of the other altered separate beams of electromagnetic energy/light into a second single collinear beam of electromagnetic energy/light without substantially changing the altered selected predetermined orientation of the chosen component of the electromagnetic wave field vectors of the plurality of portions of each of the combined separate beams of electromagnetic energy/light;

[d][i] means (17) for resolving from the first single collinear beam of electromagnetic energy/light a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors

and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, and [ii] means (17) for resolving from the second single collinear beam of electromagnetic energy/light a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors;

[e] means (17) for merging one of the resolved beams of electromagnetic energy/light from the first single collinear beam of electromagnetic energy/light with one of the other resolved beams of electromagnetic energy/light from the second single collinear beam of electromagnetic energy/light into a third single collinear beam of electromagnetic energy/light;

and means (19) for passing the third single collinear beam of electromagnetic energy/light to a projection means (20).

Atarashi et al. disclose the claimed invention except for each of the separate beams of electromagnetic energy/light having a substantially uniform flux intensity substantially across each beam of electromagnetic energy/light; and the means for producing four or more separate beams of electromagnetic energy/light includes means for producing each separate beam of electromagnetic energy/light having a rectangular cross sectional area. Konno et al. disclose a light illumination device (fig, 5) that produces a beam with a substantially uniform flux intensity substantially across the initial beam of light (column 5, lines 43-52) and a rectangular cross sectional area (using lens element 102, fig. 3; column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the light source of

Atarashi et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image. The method of utilizing the structure of the claim is inherent therein.

Regarding claims 350-352, 356-358, 362-364 and 368-370, Atarashi et al. further disclose comprising means (21 BP, 21GP1, 21BS, 21GS2 or 15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for adjusting the electromagnetic spectrum of at least one of the separate beams of electromagnetic energy/light and includes means (21 BP, 21GP1, 21BS, 21GS2) for adjusting a predetermined range of wavelengths of at least one of the separate beams of electromagnetic energy/light or includes means (15BP, 15GP, 15RP, 15BS, 15GS, 15RS) for adjusting a magnitude of at least one of the separate beams of electromagnetic energy (column 10, lines 8-11, in so far as density in this context is considered the intensity or magnitude of the light).

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LAF
October 26, 2004

MARK A. ROBINSON
PRIMARY EXAMINER